

PATENT SPECIFICATION

193,363

Application Date: Aug. 13, 1921. No. 2560 / 23.

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COMPLETE SPECIFICATION.



Improvements in or relating to Colour Photography.

I, WILLIAM VAN DOREN KELLEY, of 3193, Boulevard, Jersey City, New Jersey, United States of America, a citizen of the United States of America, do hereby
5 declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

10 This invention is an improvement in or a modification of the process claimed in Specification No. 193,069, and has for its object means enabling the obtainment of exact registration of the two images in
15 carrying out the above process.

According to my invention, in carrying out the above process I obtain exact registration by means of a full fitting pin engaging the ordinary standard elongated
20 marginal film perforations of both the positive and the negative, during contact printing, and, preferably, with a co-operating pin fitting the perforations on the other edge of the film from top to
25 bottom only, and not from side to side.

Referring to the accompanying drawing, the figure shows the arrangement of perforations and pins used according to my invention.

30 *a* is a full pin fitting the marginal perforations of the printing negative and of the positive being printed. Preferably, with this pin, I use a co-operating narrow
35 pin *b* fitting the opposite perforations of the two films, but only from the top to the bottom edges of the perforations, and not between the two lateral edges, so that all the relative shrinkage of the negative to the positive is taken up on one side at the
40 full fitting pin *a*. The development and drying of the positive after the first print and before the second causes a slight shrinkage, but by making the second print using a corresponding perforation of the
45 negative and the same positive hole and

full fitting pin for registration, the second image comes in practically identical relation with the first, and no difficulty arises due to shrinkage. Whether printing from the same side of the positive or on opposite
50 sides, the same positive hole is used in each case for the full fitting registration pin *a*, and where the second pin *b* is used the same positive hole is used in both cases for that pin.

I am aware that in Patent No. 130,603,
55 it has been proposed to obtain exact registration, by means of a registration pin filling corresponding perforations in the positive and negative from side to side to
60 take up lateral negative shrinkage and a pin filling corresponding positive and negative perforations from top to bottom to take up longitudinal negative shrinkage. It has also been proposed in Patent
65 No. 130,002 to use a pin registration means. I do not claim the method of obtaining registration, except in connection with the process claimed in the above mentioned Specification No. 193,069.

70 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

75 In carrying out the process claimed in Patent No. 193,069, obtaining an exact registration of the superposed images by means of a full fitting pin caused to pass through one of the elongated perforations
80 of the two films on one side, preferably with a co-operating pin fitting the opposite perforations from top to bottom, but not from side to side, substantially as described.

85 Dated this 22nd day of December, 1922.

MEWBURN, ELLIS & Co.,
70—72, Chancery Lane, London, W.C. 2,
Chartered Patent Agents.

[This Drawing is a full-size reproduction of the Original.]

